Rural Health Care Pilot Program
WC Docket No. 02-60

Application Submission By
The Rural Healthcare Consortium of Alabama
Comprised of Each of the Four Critical Access Hospitals in the State of Alabama
Randolph Medical Center
Atmore Community Hospital
Red Bay Hospital
Washington County Hospital

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I. **RESPONSIBLE ORGANIZATION**: The responsible organization will be the Rural Healthcare Consortium of Alabama (CONSORTIUM). This consortium is comprised exclusively of all four critical access hospitals in the state of Alabama: Randolph Medical Center, Atmore Community Hospital, Washington County Hospital and Red Bay Hospital. The CONSORTIUM is governed by a board of directors comprised of each of the four hospital CEOs and one outside director. These four hospitals formed a network in early 2007. In March 2007 the CONSORTIUM was awarded a HRSA **Rural Health Network Development Planning Grant** in the amount of $84,211.00. Currently the CONSORTIUM is in the process of obtaining 501 (c) (3) status. Randolph Medical Center will be the lead hospital on this pilot grant application.

II. **GOALS AND OBJECTIVES**: All four hospitals in the CONSORTIUM are rural. All four hospitals in the CONSORTIUM are **C**ritical **A**ccess **H**ospitals. All four hospitals in the CONSORTIUM struggle with insufficient telecommunication band width and the cost of adding increased bandwidth to their respective counties.

The goal of the CONSORTIUM and this pilot project are twofold:

1. **Enhance Local Health Care Capabilities**: Increase bandwidth and improve connectivity to enhance health care for local citizens in each of the four communities served by the network hospitals
2. **Enhance Rural Health Network Capabilities**: Increase bandwidth and improve connectivity to enhance cooperation among the four network hospitals.

By achieving the first objective each hospital will have the capability to install (and in some cases expand) critical health information technologies. For example:

- **PACs and Tele-radiology**: to illustrate -- Randolph Medical Center has recently purchased new 64 slice CT technology to provide CTA studies to its community, a community with high incidence of cardiac disease. Images from this machine must be transmitted to remote locations. Currently all that is available to the hospital is standard DSL and Cable. Both of these modalities are insufficient to handle the requirements of transmitting the CT images. A T-1 which by itself may have insufficient band width has been quoted at $981 per month – an exorbitant amount for a small rural hospital.
- **Lab Information Systems**: to illustrate -- Randolph Medical Center recently purchased a Lab Information System. This system allows for remote physician access to order tests and view results directly from their office. However, a problem occurs because standard DSL and Cable lack sufficient bandwidth for the information flow from the client server to the physician office pc. The result is that the physician office pc continuously gets logged-off the LIS server. Bottom line, a state-of-the-art technology becomes significantly underutilized and patient care suffers.
- **Future Opportunities**: such as tele-pharmacy, tele-psychiatric evaluations, remote physician assistance in ICU, operating room, and emergency room settings, personalized health records, disease registries and much more. As of now the ability to tie-in live feeds from specialized physician experts located in academic medical settings is near impossible with current telecommunication capabilities.

By achieving the second objective the four hospitals will be able to better fulfill desire to improve cooperation among the four Alabama Critical Access Hospitals and enhance shared learning. For example:

- **Video Conferencing**: The four hospitals are geographically dispersed across the state. Meetings among staff and CEOs are difficult. Video conferencing is seen as a means to connect the four hospitals and ensure collaboration on such clinical priorities as infection control, swing bed care, CMS core measures, rural health clinics, policies and procedures, etc. This video conferencing would be enabled by increased bandwidth.
- **Secure Networking**: Large academic medical centers and universities have tremendous resources available to rural hospitals. However, our communities do not have the telecommunications back bone to allow our four hospitals to take advantage of the opportunities.

To achieve these goals, the network wishes to bring each CONSORTIUM hospital up to following standards:

- **BANDWIDTH**: 2 bonded T1 lines providing 3.0 MB downstream and 3.0 MB upstream with managed router connected to the Internet.
- **CONNECTIVITY**: VPN Matrix between participating hospitals.

III. **COSTS**:

The costs shown below are two-year totals. Bonded T-1 Lines monthly costs include loop fees and all implementation. These estimates were derived from a single vendor and are considered valid and current. Cost differences from hospital to hospital are based on distance to Internet backbone.

2 YEAR PROJECT TOTALS

	TOTAL	Randolph	Atmore	Red Bay	Washington
Bonded T-1 Costs	$ 177,240	$ 38,976	$ 38,976	$ 51,192	$ 48,096
VPN Hardware Costs	$ 6,000	$ -	$ 2,000	$ 2,000	$ 2,000
Implementation Labor Costs	$ 14,625	$ 3,656	$ 3,656	$ 3,656	$ 3,656
Ongoing Labor Costs	$ 70,200	$ 17,550	$ 17,550	$ 17,550	$ 17,550
Travel Costs	$ 5,766	$ 1,441	$ 1,441	$ 1,441	$ 1,441
TOTALs	$ 273,831	$ 61,624	$ 63,624	$ 75,840	$ 72,744

2 YEAR HOSPITAL PORTION (est. at 15% of Totals)

	TOTAL	Randolph	Atmore	Red Bay	Washington
Bonded T-1 Costs	$ 26,586	5,846.40	5,846.40	7,678.80	7,214.40
VPN Hardware Costs	$ 900	-	300.00	300.00	300.00
Implementation Labor Costs	$ 2,194	548.44	548.44	548.44	548.44
Ongoing Labor Costs	$ 10,530	2,632.50	2,632.50	2,632.50	2,632.50
Travel Costs	$ 865	216.22	216.22	216.22	216.22
TOTALs	$ 41,075	$ 9,244	$ 9,544	$ 11,376	$ 10,912

IV. FOR-PROFITS

There are no for-profit hospitals or health providers included in this application.

V. FINANCIAL SUPPORT

Each hospital will provide general operating funds to supplement the 15% of the cost not covered by the Pilot Grant. It is anticipated by each member of the CONSORTIUM that the improved bandwidth and connectivity will drive

increases in hospital revenue to more than offset the increased connectivity costs.

VI. PARTICIPANTS

Randolph Medical Center
59928 Highway 22
Roanoke, AL 36274
(334) 863-4111
Fcc Rn # 0016431470
County: Randolph
RUCA Designation: 7.4

Atmore Community Hospital
401 Medical Park Drive
Atmore, AL 36502
(251) 368-2500
Fcc Rn#0016434417
County: Escambia
RUCA Designation: 10

Red Bay Hospital
211 Hospital Road
Red Bay, AL 35582
(256) 356-8160
Fcc Rn#0001751692
County: Franklin
RUCA Designation: 10

Washington County Hospital
14600 St Stephens Ave
Chatom, AL 36518
County: Washington
RUCA Designation: 10

VII. PREVIOUS EXPERIENCE

Each of the participating hospitals is small and rural. We have significant telecommunication/IT needs, but do not have significant telecommunications/IT experience in developing and managing telemedicine networks. To help rectify these shortcomings and to assist in the implementation and ongoing operation of the proposed network we will look at a combination of internal and external expertise.

VIII. PROJECT MANAGEMENT

Overall Coordination – the Rural Health Care Consortium of Alabama Board of Directors will be responsible for the coordination and overall

implementation of this project. This board is composed of the CEOs from each of the four CAH in Alabama:

- Timothy Harlin, Randolph Medical Center
- Bob Gowing, Atmore Community Hospital
- Mike Holway, Red Bay Hospital
- Douglas Tanner, Washington County Hospital

Lead Coordinator and Project Manager – Randolph Medical Center's IT Manager will be lead coordinator for the project:

Carson Holbrook, IT Coordinator, Randolph Medical Center: Mr. Holbrook's resume includes the build-out of an Frame Relay based WAN for the Harris County School System in Harris County, Georgia. This project included coordinating the installation of circuits and electronics for six schools and the central office. While employed by the school system, Mr. Holbrook was also the system's E-Rate administrator. The experience of the E-Rate program, its paperwork requirements and management of vendor bidding processes is vital to the appropriate administration of this application.

Project Coordinators – each of the other three hospitals IT Managers will assist the Lead Coordinator:

- Keith Milton, IT Coordinator, Atmore Community Hospital
- Steve Cox, IT Coordinator, Red Bay Hospital
- Brady Wright, IT Coordinator, Washington County Hospital

IX. PROJECT TIMELINE

We anticipate a period of five months from funding to completion.

	Month 1	Month 2	Month 3	Month 4	Month 5
Funding Acceptance & Waiting Period	x				
Preferred Vendor Selection		x			
Build-Out Bonded T-1 Lines			x	x	
Purchase & Install VPNs				x	
Test & Finalize Connectivity				x	x

X. PROJECT BUDGET

Below is our best estimate of actual project costs. We anticipate some in-kind contributions and recognize that those costs are not incorporated into the FCC funding.

						TOTALS
OUT-OF-POCKET COSTS						
Bonded T-1 Monthly Charge (includes installation, ongoing maintenance and Loop charge)						
Randolph Medical Center	$	1,624	x24mos	$	38,976	
Atmore Commnuity Hospital	$	1,624	x24mos	$	38,976	
Red Bay Hospital	$	2,133	x24mos	$	51,192	
Washington County Hosptial	$	2,004	x24mos	$	48,096	
						$ 177,240
Project Implementation TECHNICAL Coordination (first 5 months)						
Randolph Medical Center, Lead	75 Hours		@$65/hr	$	4,875	
Atmore Commnuity Hospital	50 Hours		@$65/hr	$	3,250	
Red Bay Hospital	50 Hours		@$65/hr	$	3,250	
Washington County Hosptial	50 Hours		@$65/hr	$	3,250	
						$ 14,625
Ongoing Maintenance TECHNICAL Coordination (2 year totals)						
Randolph Medical Center, Lead	15 Hrs per mo.		@$65/hr	$	23,400	
Atmore Commnuity Hospital	10 Hrs per mo.		@$65/hr	$	15,600	
Red Bay Hospital	10 Hrs per mo.		@$65/hr	$	15,600	
Washington County Hosptial	10 Hrs per mo.		@$65/hr	$	15,600	
						$ 70,200
VPN/FIREWALL Hardware						
Randolph Medical Center				$	-	
Atmore Commnuity Hospital				$	2,000	
Red Bay Hospital				$	2,000	
Washington County Hosptial				$	2,000	
						$ 6,000
TRAVEL (2 year totals)						
Lead Tech to all Facilities						
Mileage ($.485 per mile)	1600 RT		3 trips	$	2,328	
Food (assume 1 ind)	$40/day		3 trips	$	720	
Lodging (assume 1 ngt per trip)	$115/night		3 trips	$	1,035	
						$ 4,083
All Hospitals to Montgomery						
Mileage ($.485 per mile)	310 mile avg RT		4 trips	$	1,203	
Food (assume 3 ind/hosp)	$40/day		4 trips	$	480	
Lodging (assume no overngt)	$115/night		4 trips	$	-	
						$ 1,683
IN KIND CONTRIBUTIONS						
CEO Project Management Time						
Randolph Medical Center	No Charge			$	-	
Atmore Commnuity Hospital	No Charge			$	-	
Red Bay Hospital	No Charge			$	-	
Washington County Hosptial	No Charge			$	-	
						$ -
SUPPLIES & OVERHEAD						
Telephones	No Charge			$	-	
Office Space	No Charge			$	-	
Utilities	No Charge			$	-	
Computers	No Charge			$	-	
Copiers	No Charge			$	-	
Etc.	No Charge			$	-	
						$ -
	ESTIMATED GRAND TOTALS					$ 273,831

XI. NETWORK COORDINATION

Local Needs

Once in place each participating hospital will have access to the network for local needs such as radiology image transmissions. This use of the newly installed bandwidth would be coordinated locally at the hospital's discretion.

Network Needs

For network purposes, hospital IT coordinators will provide VPN access to each of the hospitals to allow active portals to facilitate data transmission across hospitals. These activities will be coordinated by each of the hospitals IT managers in concert to ensure reliable connectivity.

XII. SUSTAINABILITY

The need for bandwidth in the future will continue to grow. Rural hospitals must be connected to keep pace with changes in health care technology. This project offers all four CAHs in Alabama the opportunity to adapt to changing health care technology and services. We anticipate sustaining the network through a combination of additional grants and growth in operating budgets brought about by the ability to generate new business through use of the new telecommunications services.